

Logon

*** It is now 12/11/08 6:16:12 PM ***

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- Derwent World Patents Index First View (File 331)
- Derwent World Patents Index (File 351)
- Derwent World Patents Index (File 350)
- Ei EnCompassPat (File 353)
- European Patents Fulltext (File 348)
- French Patents (File 371)
- German Patents Fulltext (File 324)
- IMS Patent Focus (File 447, 947)
- INPADOC/Family and Legal Status (File 345)
- JAPIO - Patent Abstracts of Japan (File 347)
- LitAlert (File 670)
- U.S. Patents Fulltext (1971-1975) (File 652)

- U.S. Patents Fulltext (1976-present) (File 654)
- WIPO/PCT Patents Fulltext (File 349)
- TRADEMARKSCAN - U.S. Federal (File 226)

DialogLink 5 Release Notes

New features available in the latest release of DialogLink 5 (August 2006)

- Ability to resize images for easier incorporation into DialogLink Reports
- New settings allow users to be prompted to save Dialog search sessions in the format of their choice (Microsoft Word, RTF, PDF, HTML, or TEXT)
- Ability to set up Dialog Alerts by Chemical Structures and the addition of Index Chemicus as a structure searchable database
- Support for connections to STN Germany and STN Japan services

Show Preferences for details

? Help Log On Msg

*** ANNOUNCEMENTS ***

*** Join us for Update 2008! Dialog is holding updates this fall in several areas and would love for you to join us. Visit www.dialog.com/events/update to register or enter HELP UPDATES for more information.

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NEW FILE

***File 651, TRADEMARKSCAN(R) - China. See HELP NEWS 651 for details.

RESUMED UPDATING

***File 523, D&B European Financial Records

RELOADS COMPLETED

***File 227, TRADEMARKSCAN(R) - Community Trademarks

FILES RENAMED

***File 321, PLASPEC now known as Plastic Properties Database

FILES REMOVED

***File 601, Early Edition Canada

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>>>and events, please visit What's New from Dialog at <<<
>>><http://www.dialog.com/whatsnew/>. You can find news about <<<
>>>a specific database by entering HELP NEWS <file number>. <<<

? Help Off Line

* * *

Connecting to Rob Pond - Dialog - 264751

Connected to Dialog via SMS002162940

? B 15, 9, 610, 810, 275, 476, 624, 621, 636, 613, 813, 16, 160, 634, 148, 20, 35, 583,
65, 2, 347, 348, 349, 474, 475, 99, 256, 635, 570, PAPERSMJ, PAPERSEU, 47

>>>W: 476 does not exist

1 of the specified files is not available

[File 15] ABI/Inform(R) 1971-2008/Dec 10

(c) 2008 ProQuest Info&Learning. All rights reserved.

[File 9] Business & Industry(R) Jul/1994-2008/Dec 10

(c) 2008 Gale/Cengage. All rights reserved.

[File 610] Business Wire 1999-2008/Dec 11

(c) 2008 Business Wire. All rights reserved.

**File 610: File 610 now contains data from 3/99 forward. Archive data (1986-2/99) is available in File 810.*

[File 810] Business Wire 1986-1999/Feb 28

(c) 1999 Business Wire. All rights reserved.

[File 275] Gale Group Computer DB(TM) 1983-2008/Nov 26

(c) 2008 Gale/Cengage. All rights reserved.

[File 624] McGraw-Hill Publications 1985-2008/Dec 11

(c) 2008 McGraw-Hill Co. Inc. All rights reserved.

[File 621] Gale Group New Prod. Annou.(R) 1985-2008/Nov 13

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[File 636] Gale Group Newsletter DB(TM) 1987-2008/Nov 28

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[File 613] PR Newswire 1999-2008/Dec 11

(c) 2008 PR Newswire Association Inc. All rights reserved.

**File 613: File 613 now contains data from 5/99 forward. Archive data (1987-4/99) is available in File 813.*

[File 813] PR Newswire 1987-1999/Apr 30

(c) 1999 PR Newswire Association Inc. All rights reserved.

[File 161] Gale Group PROMT(R) 1990-2008/Nov 28

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**File 16: Because of updating irregularities, the banner and the update (UD=) may vary.*

[File 160] Gale Group PROMT(R) 1972-1989

(c) 1999 The Gale Group. All rights reserved.

[File 634] San Jose Mercury Jun 1985-2008/Dec 08

(c) 2008 San Jose Mercury News. All rights reserved.

[File 148] Gale Group Trade & Industry DB 1976-2008/Dec 05

(c) 2008 Gale/Cengage. All rights reserved.

**File 148: The CURRENT feature is not working in File 148. See HELP NEWS148.*

[File 20] Dialog Global Reporter 1997-2008/Dec 11

(c) 2008 Dialog. All rights reserved.

[File 35] Dissertation Abs Online 1861-2008/Feb

(c) 2008 ProQuest Info&Learning. All rights reserved.

[File 583] Gale Group Globalbase(TM) 1986-2002/Dec 13

(c) 2002 Gale/Cengage. All rights reserved.

**File 583: This file is no longer updating as of 12-13-2002.*

[File 65] Inside Conferences 1993-2008/Dec 11

(c) 2008 BLDSC all rts. reserv. All rights reserved.

[File 21] INSPEC 1898-2008/Nov W3

(c) 2008 Institution of Electrical Engineers. All rights reserved.

[File 347] JPIO Dec 1976-2008/Aug(Updated 081208)
(c) 2008 JPO & JPIO. All rights reserved.

[File 348] EUROPEAN PATENTS 1978-200848
(c) 2008 European Patent Office. All rights reserved.

[File 349] PCT FULLTEXT 1979-2008/UB=20081204|UT=20081127
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[File 474] New York Times Abs 1969-2008/Dec 11
(c) 2008 The New York Times. All rights reserved.

[File 475] Wall Street Journal Abs 1973-2008/Dec 10
(c) 2008 The New York Times. All rights reserved.

[File 99] Wilson Appl. Sci & Tech Abs 1983-2008/Oct
(c) 2008 The HW Wilson Co. All rights reserved.

[File 256] TecInfoSource 82-2008/Jul
(c) 2008 Info.Sources Inc. All rights reserved.

[File 635] Business Dateline(R) 1985-2008/Dec 11
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[File 570] Gale Group MARS(R) 1984-2008/Nov 27
(c) 2008 Gale/Cengage. All rights reserved.

[File 387] The Denver Post 1994-2008/Dec 10
(c) 2008 Denver Post. All rights reserved.

[File 471] New York Times Fulltext 1980-2008/Dec 11
(c) 2008 The New York Times. All rights reserved.

[File 492] Arizona Repub/Phoenix Gaz 19862002/Jan 06
(c) 2002 Phoenix Newspapers. All rights reserved.

**File 492: File 492 is closed (no longer updating). Use Newsroom, Files 989 and 990, for current records.*

[File 494] St LouisPost-Dispatch 1988-2008/Dec 10
(c) 2008 St Louis Post-Dispatch. All rights reserved.

[File 631] Boston Globe 1980-2008/Dec 11
(c) 2008 Boston Globe. All rights reserved.

[File 633] Phil.Inquirer 1983-2008/Dec 11
(c) 2008 Philadelphia Newspapers Inc. All rights reserved.

[File 638] Newsday/New York Newsday 1987-2008/Dec 11
(c) 2008 Newsday Inc. All rights reserved.

[File 640] San Francisco Chronicle 1988-2008/Dec 10
(c) 2008 Chronicle Publ. Co. All rights reserved.

[File 641] Rocky Mountain News Jun 1989-2008/Dec 10
(c) 2008 Scripps Howard News. All rights reserved.

[File 702] Miami Herald 1983-2008/Dec 10
(c) 2008 The Miami Herald Publishing Co. All rights reserved.

[File 703] USA Today 1989-2008/Dec 11
(c) 2008 USA Today. All rights reserved.

[File 704] (Portland)The Oregonian 1989-2008/Dec 09
(c) 2008 The Oregonian. All rights reserved.

[File 713] Atlanta J/Const. 1989-2008/Nov 09
(c) 2008 Atlanta Newspapers. All rights reserved.

[File 714] (Baltimore) The Sun 1990-2008/Dec 11
(c) 2008 Baltimore Sun. All rights reserved.

[File 715] Christian Sci.Mon. 1989-2008/Dec 10
(c) 2008 Christian Science Monitor. All rights reserved.

[File 725] (Cleveland)Plain Dealer Aug 1991-2008/Dec 10
(c) 2008 The Plain Dealer. All rights reserved.

[File 735] St. Petersburg Times 1989- 2008/Dec 07
(c) 2008 St. Petersburg Times. All rights reserved.

[File 477] Irish Times 1999-2008/Dec 11
(c) 2008 Irish Times. All rights reserved.

[File 710] Times/Sun.Times(London) Jun 1988-2008/Dec 09
(c) 2008 Times Newspapers. All rights reserved.

[File 711] Independent(London) Sep 1988-2006/Dec 12
(c) 2006 Newspaper Publ. PLC. All rights reserved.

**File 711: This file does not update. See File 757 for full daily coverage from many European sources.*

[File 756] Daily/Sunday Telegraph 2000-2008/Dec 10
(c) 2008 Telegraph Group. All rights reserved.

[File 757] Mirror Publications/Independent Newspapers 2000-2008/Dec 11
(c) 2008. All rights reserved.

[File 47] Gale Group Magazine DB(TM) 1959-2008/Dec 09
(c) 2008 Gale/Cengage. All rights reserved.

? S AU=(nakajima, k OR nakajima k? OR keiichi(2N)nakajima) OR BY=(keiichi(2N)nakajima)

>>>W: One or more prefixes are unsupported
or undefined in one or more files.

Input error: Numeric characters expected

```
34    AU=NAKAJIMA, K
11641  AU=NAKAJIMA K?
4619   AU=KEIICHI
4906   AU=NAKAJIMA
```

44 AU=KEIICHI(2N)AU=NAKAJIMA

0 BY=KEIICHI

0 BY=NAKAJIMA

0 BY=KEIICHI(2N)BY=NAKAJIMA

S1 11675 S AU=(NAKAJIMA, K OR NAKAJIMA K? OR KEIICHI(2N)NAKAJIMA) OR
BY=(KEIICHI(2N)NAKAJIMA)

? s pd<19990329

Processing

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>>>W: One or more prefixes are unsupported
or undefined in one or more files.

S2 61950670 S PD<19990329

? s s1 and s2

11675 S1

61950670 S2
S3 6858 S S1 AND S2

? s s3 and (electronic(w)settlement)
Processing
6858 S3
9856315 ELECTRONIC
2054022 SETTLEMENT
3092 ELECTRONIC(W)SETTLEMENT
S4 0 S S3 AND (ELECTRONIC(W)SETTLEMENT)

? s s3 and (electronic(w)(payment or payments))
Processing
Processing
6858 S3
9856315 ELECTRONIC
3405525 PAYMENT
3007053 PAYMENTS
120377 ELECTRONIC(W)(PAYMENT OR PAYMENTS)
S5 0 S S3 AND (ELECTRONIC(W)(PAYMENT OR PAYMENTS))

? s s3 and (network)
6858 S3
13975206 NETWORK
S6 47 S S3 AND (NETWORK)

? s s6 and (terminal or communication or communications or computer or computeriz???)
47 S6
2304976 TERMINAL
5981783 COMMUNICATION
17264508 COMMUNICATIONS
15031837 COMPUTER
457532 COMPUTERIZ???

S7 37 S S6 AND (TERMINAL OR COMMUNICATION OR COMMUNICATIONS OR COMPUTER OR
COMPUTERIZ???)

? s 7 and (settlement or payment or payments or micropayment or micropayments)

Processing

Processing

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30167960 7

2054022 SETTLEMENT

3405525 PAYMENT

3007053 PAYMENTS

3929 MICROPAYMENT

5422 MICROPAYMENTS

S8 2123427 S 7 AND (SETTLEMENT OR PAYMENT OR PAYMENTS OR MICROPAYMENT OR
MICROPAYMENTS)

? S s7 AND (SETTLEMENT OR PAYMENT OR PAYMENTS OR MICROPAYMENT OR MICROPAYMENTS)

37 S7

2054022 SETTLEMENT

3405525 PAYMENT

3007053 PAYMENTS

3929 MICROPAYMENT

5422 MICROPAYMENTS

S9 0 S S7 AND (SETTLEMENT OR PAYMENT OR PAYMENTS OR MICROPAYMENT OR
MICROPAYMENTS)

? rd s7

>>>W: Duplicate detection is not supported for File 347.

Duplicate detection is not supported for File 348.

Duplicate detection is not supported for File 349.

Records from unsupported files will be retained in the RD set.

S10 37 RD S7 (UNIQUE ITEMS)

? t s7/free/all

>>>W: "FREE" is not a valid format name in file(s): 347-349

? t s7/k/all

7/K/1 (Item 1 from file: 347)

JAPIO

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Image available

ABNORMALITY RESTORATION METHOD/SYSTEM FOR NETWORK

...

Published: 19990106)

Inventor: NAKAJIMA KATSUTOSHI

NISHIYAMA HIROSHI

MURAKAMI KATSUMI

NORIZUKI AKIRA

FURUYA YOSHIYUKI

ABSTRACT

...BE SOLVED: To provide the abnormality restoration method and the abnormality restoration system of a network, which can restore the communication function of the network to a normal state as much as possible even if the communication function of the network is damaged.

SOLUTION: When the communication function of the network is judged damaged owing to the disconnection of a main data transmission line 11 or the occurrence of an abnormal state in communication IC 5, CPU 7 in a station unit restores the communication function of the network to the normal state as much as possible by transmitting network maintenance information which is required for maintaining the communication function as the network to CPU 7a of a master station unit MU through an auxiliary data transmission line... Di01

7/K/2 (Item 2 from file: 347)

JAPIO

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Image available

ABNORMALITY MONITORING METHOD/SYSTEM FOR NETWORK

...

Published: 19990106)

Inventor: NORIZUKI AKIRA

MURAKAMI KATSUMI

NISHIYAMA HIROSHI

NAKAJIMA KATSUTOSHI

ABSTRACT

PROBLEM TO BE SOLVED: To provide the abnormality monitoring system of a network, which can maintain the network management function of a master station unit to a normal state even if a data transmission line is disconnected or a communication means controlling the reception and transmission of communication data becomes an abnormal state.

SOLUTION: When the communication function of the network is judged damaged owing to the disconnection of the main data transmission line 11 or the occurrence of the abnormal state in communication IC 5, CPU 7 informs the master station unit MU of the effect of abnormality... Di01

7/K/3 (Item 3 from file: 347)

JAPIO

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Image available

ABNORMALITY RECOVERY DEVICE FOR NETWORK

...

Published: 19981027)

Inventor: NORIZUKI AKIRA

MURAKAMI KATSUMI

NISHIYAMA HIROSHI

NAKAJIMA KATSUTOSHI

JAPIO Class: 44.3 (COMMUNICATION --Telegraphy); 44.2 (COMMUNICATION --

JAPIO Keyword:

ABSTRACT

PROBLEM TO BE SOLVED: To maintain the data transmitting function of the network by sending communication data, having arrived when a communication means is in an abnormal state, out to the station unit equipped with the communication means in the abnormal state... ..When packet data including the ACK code is not received, namely, when a normal data communication is not established although a normal data communication is established, it is considered that its own communication IC 5 is in an abnormal state and switching control is so performed to switch... ..1 is bypassed to a light emission part 3. The packet data arriving when the communication IC 5 is in the abnormal state passes through this slave station unit SU and... Di01

7/K/4 (Item 4 from file: 347)

JAPIO

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Image available

ABNORMALITY MONITORING DEVICE FOR NETWORK

...

Published: 19981027)

Inventor: MURAKAMI KATSUMI

NORIZUKI AKIRA

NISHIYAMA HIROSHI
NAKAJIMA KATSUTOSHI

JAPIO Class: 44.3 (COMMUNICATION -- ...Telegraphy); 44.2 (COMMUNICATION --
JAPIO Keyword:

ABSTRACT

PROBLEM TO BE SOLVED: To provide an abnormality monitoring device for network by which a network management function is kept in a normal state in a master station unit even on... ..slave mode to the master station unit MU via a data transmission line, then the network management function in the master station unit is kept in the normal state. Di01

7/K/5 (Item 5 from file: 347)

JAPIO

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Image available

COMMUNICATION EQUIPMENT

...

Published: 19981009)

Inventor: NAKAJIMA KOICHI

YAMADA HIROTOSHI

TANAKA KENTARO

JAPIO Class: 44.3 (COMMUNICATION -- ...Telegraphy); 44.4 (COMMUNICATION --

JAPIO Keyword:

ABSTRACT

PROBLEM TO BE SOLVED: To provide a communication equipment which can reproduce a source clock frequency optimum for an application system by suppressing... ..is provided with a 1st buffer means 2 for holding received data sent from a communication network 25 at fixed speed with the source clock as a reference, a 2nd buffer means... Di01

7/K/6 (Item 6 from file: 347)

JAPIO

(c) 2008 JPO & JAPIO. All rights reserved....

Published: 19980529)

Inventor: NAKAJIMA KATSUYA

FUJINUMA YOSHIO

ITO KEIJI

YANOKURA TOSHIMI

JAPIO Class: 44.2 (COMMUNICATION -- ...Transmission Systems); 44.4 (COMMUNICATION --

JAPIO Keyword:

ABSTRACT

...SOLUTION: This transmitter is composed of a communication function part 1 connected to a mobile communication network so as to exchange sound information and image information such as characters or images, display... ..sound information, and control part 6 for controlling these respective parts, etc. The contents of

communication due to the will transmitting means are stored in a communication memory 11 for each means such as characters or conversation by writing and selected from a tablet 3. The selected will transmitting means can be transferred from the communication memory 11 to the display part 2 and displayed on the display part 2. Besides... Di01

7/K/7 (Item 7 from file: 347)

JAPIO

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Published: 19980529)

Inventor: AOYAMA ISAO

SATO HIROYUKI

NAKAJIMA KATSUTO

OTSUBO MICHIO

SAKATA YUKIE

JAPIO Class: ...Computer Applications)

JAPIO Keyword:

ABSTRACT

...order of the nurses and patients by displaying the visiting schedule obtained in a neural network output evaluation means and correcting a planned result on the display... ..SOLUTION: A visiting time neural network 6 for obtaining the visiting time of respective visits and a nurse neural network 7 for obtaining the nurses in charge of the respective visits are constructed by using a nurse duty calendar and visiting information by a neural network construction means 5. Based on the output of the visiting time neural network 6 and the nurse neural network 7, the visiting time and date and nurses in charge of the respective visits are obtained in the neural network output evaluation means 8. The obtained visiting schedule is displayed by a planned result display... Di01

7/K/8 (Item 8 from file: 347)

JAPIO

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Published: 19980424)

Inventor: NAKAJIMA KUNIAKI

JAPIO Class: 44.2 (COMMUNICATION --Transmission Systems); 44.4 (COMMUNICATION --

JAPIO Keyword:

ABSTRACT

...can made a phone call to another PS without being consciousness of a telephone line network where the PS exists, and the caller can make a phone call by using both telephone numbers of a PHS network and the NTT public network, and to provide a portable handy phone system using the PHS automatic incoming call system... ..SOLUTION: The portable handy phone system is provided with a public line

network 2, a public line exchange 6, a radio terminal exclusive master set 8, a radio telephone network 1, a radio telephone network exchange 5 interconnected to the public line exchange 6, radio telephone base stations 7, and radio telephone mobile stations 9, 10. The public line network 2 is provided with an HLR 4 that stores information indicating whether or not the mobile stations 9, 10 belong to the public line exchange 6, the radio telephone network 1 is provided with an HLR 3 that stores information indicating whether or not the mobile stations 9, 10 belong to the radio telephone network exchange 5, the radio terminal exclusive master set 8 or the radio telephone base station 7

detects whether or not... Di01

7/K/9 (Item 9 from file: 347)

JAPIO

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Published: 19980220)

Inventor: SHIRAISHI SUSUMU

SATO HIROYUKI

NAKAJIMA KATSUTO

JAPIO Class: ...Computer Applications)

JAPIO Keyword:

ABSTRACT

PROBLEM TO BE SOLVED: To reduce the communication frequency between computers and to grasp the progress state of job execution in the load distribution batch system connecting plural computers to a network.

Di01

7/K/10 (Item 10 from file: 347)

JAPIO

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Image available

IMAGE-VOICE-DATA SIMULTANEOUS COMMUNICATION SYSTEM USING FACSIMILE
COMMUNICATION NETWORK

...

Published: 19970819)

Inventor: NAKAJIMA KAZUTAKA

JAPIO Class: 44.4 (COMMUNICATION --Service Automation); 44.2 (COMMUNICATION -- ...

...Transmission Systems); 44.3 (COMMUNICATION --Telegraphy); 44.6 (COMMUNICATION -- ...

...Television); 44.7 (COMMUNICATION --

JAPIO Keyword:

ABSTRACT

PROBLEM TO BE SOLVED: To attain the simultaneous communication of images, voices and data by connecting together the facsimile data conversion devices to perform... ..interface. These facsimile signals are simultaneously transmitted to plural opposite parties via a broadcast simultaneous communication system using a conventional F network as if the messages were transmitted. At the reception side, the received facsimile signals are... ..signals and outputted with the devices 101 and 102 used as interfaces. Thus the simultaneous communication is attained for the images, voices and data via an existing facsimile communication network. Di01

7/K/11 (Item 11 from file: 347)

JAPIO

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Published: 19960903)

Inventor: KAKEGAWA TAKASHI

NAKAJIMA KOICHI

ITO HIROAKI

JAPIO Class: ...Traffic); 44.3 (COMMUNICATION --

JAPIO Keyword:

ABSTRACT

...and in which a bottleneck does not occur in an information transmission capacity between information communication networks in the formed vehicle... ...CONSTITUTION: When a plurality of information communication networks 20 in a formed vehicle are cascade connected between the networks in a predetermined... ...added to a reference node address 30 allocated to indoor units 24 of the information communication network 20b in the vehicle of a rear stage is reallocated to each indoor unit 24. The address 30 is used for the network 20a in the vehicle of a front stage, an addition node address is used for the network 20b in the vehicle of the rear stage, and hence a new single information communication network 20c for the vehicle is reconstructed. Di01

7/K/12 (Item 12 from file: 347)

JAPIO

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Image available

COMPUTER SYSTEM

...

Published: 19960402)

Inventor: AIMOTO TAKESHI

NAKAJIMA KENJI

TANABE SHINICHI

HASHIMOTO KAZUHIRO

IWAMOTO HIROSHI

YOSHIZAWA SATOSHI

MURAYAMA HIDEKI

HAYASHI TAKEHISA

JAPIO Class: ...Computer Applications); 44.3 (COMMUNICATION --

JAPIO Keyword:

ABSTRACT

PURPOSE: To provide a mutual connection network which reduces the overhead of communication software by transferring plural successive packets successively in a high-speed mutual connection network that is applicable for parallel processing when the mutual connection network can be utilized as a network for decentralized processing... ...CONSTITUTION: A computer node 100 is equipped with a packet transfer adapter 110, which makes a packet communication with another computer node 100 through a packet communication network 190. Packets sent from the packet transfer adapter 110 have successive reception indication information and when the successive reception indication information is ON, the packet communication network 190 does not release a packet transfer path from the same transmission- side computer even after the packet transfer, so that the reception-side computer can receive packets successively from the same transmission-side computer by the function. This constitution can, therefore, improve the overhead of the communication software by transferring plural successive packets

successively in the mutual connection network. Di01

7/K/13 (Item 13 from file: 347)

JAPIO

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Published: 19951110)

Inventor: HIRATA MANABU

YOSHIKAWA NORIO

NAKAJIMA KAZUYOSHI

JAPIO Class: 44.3 (COMMUNICATION --Computer Applications)

JAPIO Keyword:

ABSTRACT

...To obtain a system environment independently of a specification specific to each device and each network by providing a virtual model to cover a difference from specifications between different kind of devices and a difference from specifications between network protocols to the device... ..100 accesses the device model 300a in place of the real devices 400. Furthermore, a network model 300b is a virtual model devised sufficiently to cover a difference from network protocols and the application 100 accesses the network model 300b in place of the real networks. Thus, the portability of the applications is... Di01

7/K/14 (Item 14 from file: 347)

JAPIO

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Published: 19950502)

Inventor: SHIMA YOSHIHIRO

HATANO HIDEKAZU

MARUKAWA KATSUMI

KOGA MASASHI

NAKAJIMA KAZUKI

KADOTA AKIZO

KURINO KIYOMICHI

SUGIMOTO TAKEYUKI

JAPIO Class: ...Computer Applications)

JAPIO Keyword:

ABSTRACT

...a recognition station 105, a correction station 106, and a retrieval station 107 to a network 100. Consequently, plural slip documents can be read. Further, the adequacy of entry contents is... Di01

7/K/15 (Item 15 from file: 347)

JAPIO

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Published: 19950411)

Inventor: SHIMA YOSHIHIRO

MARUKAWA KATSUMI
KOGA MASASHI
NAKAJIMA KAZUKI
UEHARA TETSUZO

JAPIO Class: ...Computer Applications); 30.2 (MISCELLANEOUS GOODS

JAPIO Keyword:

ABSTRACT

...level and the situation of a reader. When a document is sent to a reader terminal 101 from a writer terminal 100 via a network 102, the processor 103 makes clear the purpose and the situation of the reader and... Di01

7/K/16 (Item 16 from file: 347)

JAPIO

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Published: 19950210)

Inventor: NAKAJIMA KOJI

HO IZUMI

UOTANI TOKIHIKO

ABSTRACT

...period and cost of construction by connecting a water-receiving connection, a branch connection, a terminal connection and a water supply conduit to one another in a network according to the place of installation of a water-supply- piping composite member by which.... ...and water supplied from the tap water supply pipe is distributed from each water supply terminal 2(sub 1)-2(sub 5). The water supply pipe 3 has a water-receiving... ...to the positions of the water supply terminals 2(sub 1)-2(sub 5), a terminal connection 6 connected to each of the water supply terminals, and a water supply conduit... ...between each connection 4-6. The water-receiving connection 4, the branch connection 5, the terminal connection 6 and the water supply conduit 7 are provided in a network to correspond to the place of installation of composite member for the water supply pipe... Di01

7/K/17 (Item 17 from file: 347)

JAPIO

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Published: 19950131)

Inventor: SHIMA YOSHIHIRO

MARUKAWA KATSUMI

KOGA MASASHI

NAKAJIMA KAZUKI

JAPIO Class: ...Computer Applications); 45.3 (INFORMATION PROCESSING

JAPIO Keyword:

ABSTRACT

...words in the character strings and the connection relation of the plural words by a computer 201 for instructions and are sent through a network 100 to the computer 204 for control. The computer 204 for the control divides the items and the contents for respective groups and stores... Di01

7/K/18 (Item 18 from file: 347)

JAPIO

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Published: 19941125)

Inventor: NAKAJIMA KOICHI

JAPIO Class: 44.3 (COMMUNICATION --Telegraphy); 44.2 (COMMUNICATION --

JAPIO Keyword:

ABSTRACT

PURPOSE: To provide an ATM communication equipment in which an H/W circuit of an MID generating section is made small... ..an MID generating section 1 in a CLSF serving the connectionless service in an ATM network increments a counter 2 by a frame start signal of a LAN frame and the... ..of the MID generating section 1 is made small and simplified, and then the ATM communication equipment is realized, in which the H/W circuit of the MID generating section is... Di01

7/K/19 (Item 19 from file: 347)

JAPIO

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Image available

COMMUNICATION CONNECTOR

...

Published: 19931105)

Inventor: NAKAJIMA KAZUHIRO

TANAKA SEIJI

OKADA FUMIO

JAPIO Class: 44.3 (COMMUNICATION --

JAPIO Keyword:

ABSTRACT

PURPOSE: To obtain the communication connector at a low cost with high general-purpose performance by providing plural memories able to write a protocol of a host computer and a terminal equipment able to make data communication via a network to the connector... ..CONSTITUTION: Protocol write memories 14D1-14D4 write each protocol used by a host computer G or a terminal equipment going to execute data transmission reception and delete the protocol after the end of execution. Data storing memories 13E1-13E5 receive data outputted from the host computer G and the terminal equipment through transmission lines L1-L5 and store the data tentatively. Furthermore, a transmission processing... Di01

7/K/20 (Item 20 from file: 347)

JAPIO

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Published: 19920804)

Inventor: TANIGAWA HIROYA

TANAKA TOMOAKI

HASEYAMA HIROSHI

NAKAJIMA KOICHI

JAPIO Class: 44.3 (COMMUNICATION --

JAPIO Keyword:

ABSTRACT

...The maximum throughput of the respective terminals 6a-6c is decided in advance for each terminal and by recognizing the terminals 6a-6c outputting the call originating requests, the call control... ..respective terminals are applied to a multiplex bus 7, multiplexed and transmitted to an ATM network by a line I/F part 5. Di01

7/K/21 (Item 21 from file: 347)

JAPIO

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Image available

COMMUNICATION UNIT FOR PROGRAMMABLE CONTROLLER

...

Published: 19920611)

Inventor: NAKAJIMA KAZUYOSHI

ABSTRACT

...the overhead of a system of a PC at the time of repeating of a network by constituting this unit so that a communication control means provided on the communication unit executes the communication control between the networks, based on a routing table stored in a storage means... ..CONSTITUTION: The communication unit has an interface function to a programmable controller (PC) 12, and also, is provided... ..interval RAM 35. Moreover, the routing table stored in its internal RAM 35 as a communication control means is subjected to retrieval processing, and based on its routing table, the communication control between networks is executed. In such a manner, it becomes unnecessary that the PC main body retrieves the routing table at the time of repeating of the network, the overhead of the PC main body is decreased, and the throughput of the whole communication system is improved. Di01

7/K/22 (Item 22 from file: 347)

JAPIO

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Image available

INTER-NETWORK COMMUNICATION CONTROL SYSTEM FOR PROGRAMMABLE CONTROLLER

...

Published: 19920522)

Inventor: NAKAJIMA KAZUYOSHI

ABSTRACT

PURPOSE: To increase the extendability of a network by setting the addresses of networks passed up to an opposite network, the node addresses of repeating communication units, the numbers of communication units connecting with the networks, and the addresses of the networks in a routine table... ..PC4 is stored with a routing table wherein the addresses of networks passed from its network to an opposite network for a data communication, the node addresses of repeating communication units A and B between the networks X and Y, the numbers of the

communication units A and B connected to the networks X and Y which has the addresses, and the addresses of the networks are set. Then each PC makes a data communication according to its routing table. Consequently, a data communication between network can be made without depending upon the hardware constitution of the repeating PCs and the extendability of network structure is improved. Di01

7/K/23 (Item 23 from file: 347)

JAPIO

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Published: 19911106)

Inventor: NAKAJIMA KEISUKE

INUZUKA TATSUKI

YASUKAWA SABURO

KOJIMA YASUYUKI

HORI YASURO

JAPIO Class: 44.7 (COMMUNICATION --Computer Applications)

JAPIO Keyword:

ABSTRACT

...user looks at a transmitted original, and decides the method of picture processing and a communication system, etc., and designates these from an operation data input part 13. A learning part... ..input picture data by a system control part 154, and stores it in a neural network 161. A subtractor 163 in the learning part 16 compares the set parameter from the input part 13 and the learnt result stored in the network 161 with each other. As the result of comparison, when there is difference, the correlation... ..correlation added with a learning coefficient .beta. by an adder 162 is given to the network 161. The network 161 can execute the learning by changing successively its inside contents on the basis of... Di01

7/K/24 (Item 24 from file: 347)

JAPIO

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Image available

VIDEO CONFERENCE TERMINAL EQUIPMENT

...

Published: 19900523)

Inventor: NAKAJIMA KOICHI

JAPIO Class: 44.6 (COMMUNICATION --

JAPIO Keyword:

ABSTRACT

...effect of timewise fluctuation generated on the line. Thus, the timewise fluctuation in the packet network is absorbed and a stable picture at all times without timewise fluctuation is reproduced at... Di01

7/K/25 (Item 25 from file: 347)

JAPIO

(c) 2008 JPO & JAPIO. All rights reserved....

Published: 19890426)
Inventor: NAKAJIMA KENSUKE
JAPIO Class: 44.3 (COMMUNICATION --
JAPIO Keyword:

ABSTRACT

...number of sets serviced at the same time by managing the operating state of a terminal equipment connected once by a terminal management memory circuit of a center equipment and opening an output port of the center equipment for other terminal equipments when all data with respect to a request from the terminal equipment are finished for the transmission... ..publishing company is fetched by a data fetch section 102 through an external data input terminal 101 via a public line and stored in an area to be stored in a... ..When a data request command comes to a data input/output port 108 via a network from a terminal equipment, it is reproduced by a reception circuit 105, the result enters a transmission management circuit 107 to send a character information data to the terminal equipment via the data input/output port 108 from a transmission circuit 104 based onmemory circuit 103. Moreover, when a update data is given via an external data input terminal 101, it is stored in the data memory circuit 103 as a update data. Di01

7/K/26 (Item 26 from file: 347)
JAPIO
(c) 2008 JPO & JAPIO. All rights reserved....
Published: 19870722)
Inventor: NIIMI HIDEKAZU
NAKAJIMA KENJI
NAGAYAMA KAZUHIRO
FUNAKAWA KIMITOSHI
JAPIO Class: 44.4 (COMMUNICATION --
JAPIO Keyword:

ABSTRACT

PURPOSE: To simplify the processing of reservation communication by inquiring the conditions of a terminating side reserving terminal when the permission of reservation is decided by the center side, and determining the final... ..CONSTITUTION: Receiving reservation information from a reservation terminal 4, a center 11 retrieves the idle status of a required communication equipment in a network from a file 14 based on the received information, and at the validity of invalidity to the reservation requesting terminal 4. In case of validity, the center 11 retrieves the reservation terminal included in the receiving side communication terminals and inquires the validity/invalidity of reservation to the retrieved terminal. If the reservation is validated as the result of inquiry, the preceding information is kept as it is, but when invalidated, information indicating the invalidity reservation is sent to the terminal 4 and cancels the precedently sent information of validity. Di01

7/K/27 (Item 27 from file: 347)
JAPIO
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Image available
CHARGING SYSTEM OF PRIVATE BRANCH EXCHANGE NETWORK IN COMMON USE OF TRUNK
LINE

...

Published: 19860628)

Inventor: NAKAJIMA KAZUICHI

JAPIO Class: 44.4 (COMMUNICATION --

JAPIO Keyword:

7/K/28 (Item 28 from file: 347)

JAPIO

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Published: 19850406)

Inventor: SEKIGUCHI SHINICHI

SUNOCHI KENJI

AOYAMA SACHIO

NAKAJIMA KENZABURO

KATO TSUKASA

SANHONGI TOSHIRO

JAPIO Class: 44.4 (COMMUNICATION --

JAPIO Keyword:

ABSTRACT

...during talking to an extension telephone set TEL-B, key data is transferred to a network control circuit NPU and the line is subjected to retention. The own retention display is... Di01

7/K/29 (Item 29 from file: 347)

JAPIO

(c) 2008 JPO & JAPIO. All rights reserved....

Published: 19850109)

Inventor: SEKIGUCHI SHINICHI

NAKAJIMA KENZABURO

AOYAMA SACHIO

SANHONGI TOSHIRO

KATO TSUKASA

SUNOCHI KENJI

JAPIO Class: 44.4 (COMMUNICATION --

JAPIO Keyword:

ABSTRACT

...to a stabilized power supply device 5 and a voltage is produced at an output terminal. Since transistors (TRs) Q(sub 1)-Q(sub n) are turned off by the control of the network control power supply on/off control circuit 10, no power is supplied to each extension... ..control circuit 10 is activated and a prescribed signal is outputted respectively to each output terminal with shifted timing, then the TRs Q(sub 1)-Q(sub n) are turned on... Di01

7/K/30 (Item 30 from file: 347)

JAPIO

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Image available

CONTROL SYSTEM FOR CONGESTION OF ADJACENT STATION IN PACKET EXCHANGER NETWORK

...

Published: 19820121)

Inventor: KOMATSU TEIJIRO

KAMIMURA KUNIO

SARAI KOICHI

TAKAHASHI YOSHINORI

NAKAJIMA KIYOHIDE

JAPIO Class: 44.3 (COMMUNICATION -- ...Telegraphy); 44.2 (COMMUNICATION --

JAPIO Keyword:

ABSTRACT

...CONSTITUTION: A packet exchange network 10 consists of a plurality of exchange stations such as packet exchange stations 1-4... ..24 connecting each packet exchange station, and each packet station is allocated with a data terminal 11, which is communicated through the packet exchange network. Each packet exchange station has a... Di01

7/K/31 (Item 31 from file: 347)

JAPIO

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Image available

PREVENTING SYSTEM OF FAILURE CONGESTION FOR PACKET EXCHANGE NETWORK

...

Published: 19820121)

Inventor: KOMATSU TEIJIRO

KAMIMURA KUNIO

SARAI KOICHI

TAKAHASHI YOSHINORI

NAKAJIMA KIYOHIDE

JAPIO Class: 44.3 (COMMUNICATION -- ...Telegraphy); 44.2 (COMMUNICATION --

JAPIO Keyword:

ABSTRACT

...of new congestion, by giving the difference of a standard value for usage rate of network constituting element on detour condition to a packet detoured through the occurrence of congestion of... ..CONSTITUTION: A packet exchange network 10 consists of a plurality of exchangers such as packet exchangers 11-11n and relay... ..data terminals 31-3n are allocated to each exchanger. In relaying of packets within the network, a network constituent element congestion display is set to the packet having congested network constituent element to be relayed and it is detoured to the network constituent element registered as the next detour. In a detoured exchanger, the relay of the... Di01

CHARACTER COMMUNICATION DEVICE

Inventor:

• NAKAJIMA, Kei, Sega Enterprises, Ltd...

;;

Country	Number	Kind	Date
---------	--------	------	------

Abstract ...A1

Type	Pub. Date	Kind	Text
Available Text	Language	Update	Word Count
Total Word Count (Document A)			
Total Word Count (Document B)			
Total Word Count (All Documents)			

Specification: ...to an improved technology of inputting characters into an information processing device or a portable communication device which does not have a JIS (Japanese Industrial Standard) keyboard or other types of keyboards for inputting characters. Background Art

"Chat" is a method of online communication conducted on a computer network, either between parties connecting to the network or between a party connecting to the network and his host computer. "Chat" is a conversational function conducted through a network by inputting characters, and its participants generally input words with the aid of a JIS... ..to participate in a "chat", one must have a terminate device for connection to a network. Various types of terminate devices may be used for this purpose, including a so-called "personal computer", a portable terminate device, or a game device having a modem mounted thereon.

Furthermore, in... ..sends a message in a language which is understood by the other party of the communication.

However, in the case of a portable termination device (hand-held computer), in order to make the overall shape of the device a small size, mounting a... ..over such keyboard and selects a character, and makes the selected characters recognized by a computer built inside the device.

However, selecting each character from a software keyboard displayed according to the Japanese fifty-syllabary is time consuming, and is not suitable for a real-time communication such as "chats."

Furthermore, although "chats" are generally performed in a language commonly understood by the parties of communication, it is preferable that "chats" may be easily performed between parties whose languages of daily... ..is to facilitate the input of characters in an information processing device or a portable communication device which does not have a character inputting keyboard.

Moreover, another purpose of this invention... ..languages.

Description of the Invention

In order to accomplish the purposes mentioned above, the character communication device according to the present invention is a communication device connected to a network and enabling communication of messages at least by

characters, which has a transmitting and receiving means for implementing communication with the communication device of the other party of communication via a network, a communication content displaying means for displaying in a communication content displaying area of a screen display the content of communication with the communication device of the other party, a candidate term displaying means for displaying in a candidate... ..displaying area of the screen display a group of candidate terms prepared in advance for communication of the messages, a term selecting means for outputting a term selected by a transmitter... ..not able to type on keyboards can communicate by characters.

In the aforementioned invention, the communication device of the other party is either a host computer executing a program of a communication-type game in accordance with accesses from a plurality of computers having a character communication device, or a communication device operated by participants taking part in the communication-type game.

According to such structure, even if the game devices of the participants taking part in a communication-type game such as RPG does not have a keyboard for inputting characters, messages can... ..of these participants. Furthermore, online chats can be conducted among participants taking part in a communication-type game.

In the aforementioned invention, the candidate term displaying means receives the group of candidate terms from the communication device of the other party.

According to such structure, terms can be easily obtained even if one's game device does not have a database in advance. Furthermore, in a communication-type game such as RPG, glossaries conforming with the content or progress of the game... ..such area. Furthermore, by turning the pages, one may easily move to another page.

Another communication device of the present invention has a storing means for storing a message language conversion... ..converting a selected message to a message in a language of a party with whom communication is held, and a transmitting means for transmitting the converted message to the communication counterpart.

According to such structure, firstly, communication by characters (chats) can be conducted in a form of cards without requiring a keyboard... ..only select applicable messages out of a plurality of messages displayed in different languages.

Furthermore, communication device of the present invention has a storing means for storing a database including a... ..and a transmitting means for transmitting the output message marks to a party with whom communication is held.

According to such structure, since messages are sent not in a series of... ..language conversion and the preparation of database, etc. are facilitated.

By having the aforementioned character communication device formed inside (built in) a household game device, communication by characters are performed at a relatively low cost with the aid of a game... ..not including a keyboard in its standard package. This is advantageous especially when playing a communication-type game.

Regarding a device for inputting characters, it is possible to perform input operations... ..control pad, joystick, etc.) serving as an inputting device of the game device.

The character communication system according to the present invention is a character communication system connected to a network and structured to include a plurality of character communication devices capable of performing message communication at least by characters, and includes a first character communication device used for communication by a first message group in a single language, and a second character communication device used for communication by a second message group in a plurality of languages, wherein communication between the first and second character communication devices are performed using marks commonly added in advance to messages having common meanings, included... ..message group and the second message group.

According to such structure, obtained is a character communication system having a small message transmission capacity and easily displaying in different languages the messages having the same meanings.

The character communication system according to the present invention is a character communication device having a first character communication device for displaying messages in a first language, a second character communication device for displaying messages in a second language, and a network for connecting both communication devices, wherein the first character communication device has a storing means for storing a message table including a plurality of messages... ..message table, and a transmitting means for transmitting the converted message to the second character communication device.

According to such structure, it is possible to transmit from one's station a message which has been converted into the language of a party with whom communication is held.

The character inputting device according to the present invention is a character communication device for inputting characters expressed by a combination of vowels and consonants, which includes a...user's hand. Therefore, this is advantageous for a character inputting device of a portable communication device.

In the aforementioned character inputting device, the consonant inputting means can be structured by... ..by a cross key, a joystick, a pointing device, a trackball, etc.

Furthermore, the portable communication device including the aforementioned character inputting device is easy to understand using one's senses... ..and therefore, input in the Japanese language is easily conducted. Secondly, even when the portable communication device is held in the user's hand, both hands can be used upon inputting... ..inputting device is small and takes up less space, it is advantageous for a portable communication device.

Brief Description of the Drawings

Fig. 1 is an explanatory view illustrating a message forming screen of a character communication device according to the present invention. Fig. 2 is an explanatory view illustrating the overall structure of a communication network. Fig. 3 is a block diagram illustrating an example of a game device which has a communicational function. Fig. 4 is a flowchart illustrating a message formation processing in the character communication device. Figs. 5A and 5B are explanatory diagrams illustrating examples of term categories. Figs. 6A... ..diagram illustrating a character conversation conducted by three parties. Fig. 11 is a flowchart illustrating communication by three parties using message cards. Fig. 12 is an explanatory view illustrating an example... ..message conversion table. Fig. 13 is an explanatory view illustrating an example of a portable communication device (portable information processing device). Fig. 14 is an explanatory view illustrating an example of an inner circuit structure of the portable communication device. Fig. 15 is a flowchart illustrating an algorithm for distinguishing characters input through the... ..to the drawings.

Fig. 2 is an overall block diagram showing the outline of the communication system according to the present invention. Fig. 2 shows direct connection of communication terminal devices 201 and 202 capable of character communication via a network 203, as well as indirect connection of terminal devices 201 and 202 via a host computer 210. The network 203 includes a public communication line, a dedicated line, the Internet, a LAN, etc. The host computer 210 includes a data processing function and a data exchange function, and is connected to the

terminal devices 201 and 202 via the aforementioned network 203. The data processing above may include host functions of a communication-type game. In such case, the host computer, which is a server of a game, provides event information, map information, game parameters, coordinate moving information, character status information and other information. A plurality of terminal devices are connected to the network 203, and the terminal devices contemplated here are not only limited to the terminal devices placed in domestic areas but also those placed abroad.

Besides a dedicated communication device, the terminal device includes a game device having a personal computer or a communicational function. The terminal device includes at least a main body, a display, and an inputting device.

As explained below, the terminal device may be accomplished, for example, by a household game device. In such case, the... ..game controller (for example, control pad) 2b which serves as a game input device.

The terminal device 202 may also be accomplished by a similar structure, and in the present embodiment... ..4 is not essential to the present invention.

Fig. 3 shows one example of the terminal device 201 or 202, and here a game device having a modem is used. This game device can be used as a network terminal device, and one may play the so-called "communication-type game".

The game is mainly structured by a CPU block 10 for controlling the... ..etc., a subsystem 13 for reading CD-ROMs, and a modem 14 for implementing data communication with an outside party.

The CPU block 10 is structured by an SCU (System Control Unit... ..a peripheral (FDD 3b in Fig. 3) connected to a connector 3a, and conducts data communication between such peripheral. More specifically, the peripheral is connected to the SCI which is built... ..transmission and reception of data. By using a modem, one can play the so-called "communication-type game". The aforementioned game parameters, etc. are exchanged between the game server and the... ..a function of automatically recognizing the type of the peripheral connected to a connector 2a (terminal on the main body side), and collecting peripheral data, etc. in a communication system according to the type of each peripheral.

The video block 11 includes the VDP... ..MPEG AUDIO 182 and the MPEG VIDEO 183, animations can be replayed.

When playing a communication-type game under such structure, provided on the side of the game device are, for... ..new types of monsters according to the rise of the user's level.

In a communication-type game, one may find comrades of a game by playing the game through a network. For example, in a network RPG (Role Playing Game), multiple players at different locations can form a party in a... ..a virtual game space, there may be provided a bulletin board as a means of communication united with the world of game, or a letter transmission function for sending letters to... ..a chat screen. Displayed on the screen of the display 5 are a chat window (communication content displaying area) 51 for displaying the content of conversation, a keyword category window (candidate... ..are stored in the RAM 102 and displayed in the chat window 51 by a communication displaying program.

Thus, when the player selects necessary terms from a table of terms with... ..be conducted.

Although according to the embodiment explained above, data transmission is conducted between the terminal device (game device) and the host computer system (game server) using characters, the host computer system (game server) includes a database which stores sets of terms shown in Figs. 5 through 8, thereby enabling transmission of a relevant set of terms to the terminal device. Furthermore, data transmission in characters can be performed between terminal devices (game device) without the intermediation of the host computer. In such case, as in the case of communication with the host, terms can be selected from a table for inputting characters, whereby messages... ..be explained.

Fig. 9A shows an example of a display screen at the time the terminal device is set at the message exchange mode. On the screen of a monitor 5... ..9B shows an example of the other English-speaking communicator's display screen when the terminal device is in the message exchange mode. Here, "konnichiwa" ("hello" in Japanese) is converted and... ..no. "2" is transmitted to player 2 and player 3 who are participating in a communication-type game together with player 1.

The terminal device of player 2 refers to the message conversion table shown in Fig. 12, decodes... "2" to "konnichiwa" ("hello" in Japanese). The message "konnichiwa" is displayed on the screen.

The terminal device of player 3 refers to the message conversion table shown in Fig. 12, decodes... "In order to send a reply, player 2 designates a message selection mode to the terminal device and displays multiple greeting message cards on the screen. "Konnichiwa" ("hello" in Japanese) is... "is sent to the server and then transferred to player 1 from the server. The terminal device of player 1 refers to the message conversion table and decodes the received message... "in order to send a reply, player 3 designates the message selection mode to the terminal device and displays multiple greeting message cards on the screen. "HELLO" is selected and transmitted... "is sent to the server and then transferred to player 1 from the server. The terminal device of player 1 refers to the message conversion table and decodes the received message... "is thus performed between the players.

By referring to the message conversion table, the respective terminal devices can directly convert messages into the receiving party's language and send such messages. For example, when player 1 selects "ohayou" ("good morning" in Japanese), the terminal device may refer to the message conversion table and convert the message into "GOOD MORNING... "which is represented by a group of character codes.

Furthermore, when messages are exchanged between terminal devices utilizing different languages, the server may assume the role of referring to the message... "implemented at the respective devices.

The CPU (for example, the main CPU 101) of the terminal device implements these procedures when a card message mode flag is identified during the execution... "card no. "2" is transferred to player 2 and player 3 from the server. The terminal device of player 2 refers to the message conversion table and converts message card no. "2" into "konnichiwa" ("hello" in Japanese) and displays such message card on the display. The terminal device of player 3 refers to the message conversion table and converts message card no... "card no. "2", the message is converted into the receiving party's language at the terminal device and the message is transmitted to the receiving party after the language of the... "also by this method.

Although the embodiments described above suggest performance of online conversation and communication by characters via the server, the present invention is not restricted to these embodiments. The terminal game devices can communicate with each other directly through a network.

Fig. 13 is an explanatory diagram illustrating the fourth embodiment. This embodiment suggests a character inputting device in a portable communication device or a portable information processing device.

In Fig. 13, the portable communication device 300 is structured roughly by a cover 300a and a main body 300b. The... "key 322 on the left side for facilitating operation by both hands when the portable communication device is held in either hand.

At the lower verge of the input operating panel... "uppercase modes.

Fig. 14 is a block diagram schematically illustrating the structure of the portable communication device. In this Figure, any components corresponding to those shown in Fig. 13 are indicated...display unit 308 any information written into the video RAM by the CPU 301. A communication interface 306 exchanges data signals between an analog circuit modem 309. Connected to the analog circuit modem 309 is, for example, a public telecommunication line, or a local area network. An external interface 307 intermediates the computer system and an externally connected device (for example, a printer). The external interface 307 includes... "or other pointing devices can be used instead.

Industrial Applicability

As explained above, the character communication device according to the present invention requires no keyboard due to the terms displayed on... "accustomed to typing on keyboards can easily use this device.

Furthermore, another word-card character communication device according to the present invention requires no keyboard and even those having no knowledge of foreign languages can communicate with foreigners.

Moreover, by the portable communication device (information processing device) according to the present invention, both hands can be used when the communication device is held in either hand, and the device also takes up less space.

Specification: ...to an improved technology of inputting characters into an information processing device or a portable communication device which does not have a JIS (Japanese Industrial Standard) keyboard or other types of keyboards for inputting characters. Background Art

"Chat" is a method of online communication conducted on a computer network, either between parties connecting to the network or between a party connecting to the network and his host computer. "Chat" is a conversational function conducted through a network by inputting characters, and its participants generally input words with the aid of a JIS... ..to participate in a "chat", one must have a terminate device for connection to a network. Various types of terminate devices may be used for this purpose, including a so-called "personal computer", a portable terminate device, or a game device having a modem mounted thereon.

EP-755126 discloses portable communication terminal equipment permitting the user to quickly create a message for transmission. In the arrangement disclosed... ..using different key codes to communicate with each other. The intermediate code generated on the computer side by conversion from a key code corresponding to a key input is received at a handy terminal and there converted into the key code for that terminal.

Furthermore, in an online "chat", a foreigner may be included among the participants. In such... ..sends a message in a language which is understood by the other party of the communication.

However, in the case of a portable termination device (hand-held computer), in order to make the overall shape of the device a small size, mounting a... ..over such keyboard and selects a character, and makes the selected characters recognized by a computer built inside the device.

However, selecting each character from a software keyboard displayed according to the Japanese fifty-syllabary is time consuming, and is not suitable for a real-time communication such as "chats."

Furthermore, although "chats" are generally performed in a language commonly understood by the parties of communication, it is preferable that "chats" may be easily performed between parties whose languages of daily... ..is to facilitate the selection of messages in an information processing device or a portable communication device which does not have a character inputting keyboard, and to provide a character communication system including character communication devices which are easy to use even for those who have not learned to type... ..Invention

In order to accomplish the purposes mentioned above, the present invention provides a character communication system connected to a network and structured to include a plurality of character communication devices capable of performing message communication by exchanging and displaying message cards which display messages at least by characters, characterized in that the system comprises: a first character communication device used for communication by a first group of message cards in one language; and a second character communication device used for communication by a second group of message cards in another language; and in that message communication between said first and second character communication devices is performed using symbols (1, 2, 3... n) commonly assigned in advance to message... ..and said second message card group, of which the messages have common meanings.

Where the communication devices are game devices operated by participants taking part in a communication-type game, even if the game device does not have a keyboard for inputting characters... ..of these participants. Furthermore, online chats can be conducted among participants taking part in a communication type game.

The first communication device in the system of the present invention preferably has a storing means for storing... ..second language, and a transmitting means for transmitting the converted message to the second character communication device.

According to such structure, firstly, communication by characters (chats) can be conducted in a form of cards without requiring a keyboard... ..only select applicable messages out of a plurality of messages displayed in different languages.

Furthermore, communication device of the present invention has a storing means for storing a database including a... ..and a transmitting means for transmitting the output message marks to a party with whom communication is held.

According to such structure, since messages are sent not in a series of... ..language conversion and the preparation of database, etc. are facilitated.

By having the aforementioned character communication device formed inside (built in) a household game device, communication by characters are performed at a relatively low cost with the aid of a game... ..not including a keyboard in its standard package. This is advantageous especially when playing a communication-type game.

Regarding a device for inputting characters, it is possible to perform input operations... ..According to the structure of the system according to the invention, obtained is a character communication system having a small message transmission capacity and easily displaying in different languages the messages... ..station a message which has been converted into the language of a party with whom communication is held.

Brief Description of the Drawings

Fig. 1 is an explanatory view illustrating a message forming screen of a character communication device according to a background example.

Fig. 2 is an explanatory view illustrating the overall structure of a communication network. Fig. 3 is a block diagram illustrating an example of a game device which has a communicational function. Fig. 4 is a flowchart illustrating a message formation processing in the character communication device. Figs. 5A and 5B are explanatory diagrams illustrating examples of term categories. Figs. 6A... ..are explanatory diagrams illustrating a character conversation where message cards are used in a character communication system according to the invention. Fig. 10 is an explanatory diagram illustrating a character conversation conducted by three parties. Fig. 11 is a flowchart illustrating communication by three parties using message cards. Fig. 12 is an explanatory view illustrating an example... ..message conversion table. Fig. 13 is an explanatory view illustrating an example of a portable communication device (portable information processing device). Fig. 14 is an explanatory view illustrating an example of an inner circuit structure of the portable communication device. Fig. 15 is a flowchart illustrating an algorithm for distinguishing characters input through the... ..to the drawings.

Fig. 2 is an overall block diagram showing the outline of the communication system according to the background example. Fig. 2 shows direct connection of communication terminal devices 201 and 202 capable of character communication via a network 203, as well as indirect connection of terminal devices 201 and 202 via a host computer 210. The network 203 includes a public communication line, a dedicated line, the Internet, a LAN, etc. The host computer 210 includes a data processing function and a data exchange function, and is connected to the terminal devices 201 and 202 via the aforementioned network 203. The data processing above may include host functions of a communication-type game. In such case, the host computer, which is a server of a game, provides event information, map information, game parameters, coordinate moving information, character status information and other information. A plurality of terminal devices are connected to the network 203, and the terminal devices contemplated here are not only limited to the terminal devices placed in domestic areas but also those placed abroad.

Besides a dedicated communication device, the terminal device includes a game device having a personal computer or a communicational function. The terminal device includes at least a main body, a display, and an inputting device.

As explained below, the terminal device may be accomplished, for example, by a household game device. In such case, the... ..game controller (for example, control pad) 2b which serves as a game input device.

The terminal device 202 may also be accomplished by a similar structure, and in the present embodiment... ..4 is not essential to the present invention.

Fig. 3 shows one example of the terminal device 201 or 202, and here a game device having a modem is used. This game device can be used as a network terminal device, and one may play the so-called "communication-type game".

The game is mainly structured by a CPU block 10 for controlling the... ..etc., a subsystem 13 for reading CD-ROMs, and a modem 14 for implementing data communication with an outside party.

The CPU block 10 is structured by an SCU (System Control... ..a peripheral (FDD 3b in Fig. 3) connected to a connector 3a, and conducts data communication between such peripheral. More specifically, the peripheral is connected to the SCI which is built... ..transmission and reception of data. By using a modem, one can play the so-called "communication-type game". The aforementioned game parameters, etc. are exchanged between the game server and the... ..a function of automatically recognizing the type of the peripheral connected to a connector 2a (terminal on the main body side), and collecting peripheral data, etc. in a communication system according to the type of each peripheral.

The video block 11 includes the VDP... ..MPEG AUDIO 182 and the MPEG VIDEO 183, animations can be replayed.

When playing a communication-type game under such structure, provided on the side of the game device are, for... ..new types of monsters according to the rise of the user's level.

In a communication-type game, one may find comrades of a game by playing the game through a network. For example, in a network RPG (Role Playing Game), multiple players at different locations can form a party in a... ..a virtual game space, there may be provided a bulletin board as a means of communication united with the world of game, or a letter transmission function for sending letters to... ..a chat screen. Displayed on the screen of the display 5 are a chat window (communication content displaying area) 51 for displaying the content of conversation, a keyword category window (candidate... ..are stored in the RAM 102 and displayed in the chat window 51 by a communication displaying program.

Thus, when the player selects necessary terms from a table of terms with... ..be conducted.

Although according to the example explained above, data transmission is conducted between the terminal device (game device) and the host computer system (game server) using characters, the host computer

system (game server) includes a database which stores sets of terms shown in Figs. 5 through 8, thereby enabling transmission of a relevant set of terms to the terminal device. Furthermore, data transmission in characters can be performed between terminal devices (game device) without the intermediation of the host computer. In such case, as in the case of communication with the host, terms can be selected from a table for inputting characters, whereby messages... ..be explained.

Fig. 9A shows an example of a display screen at the time the terminal device is set at the message exchange mode. On the screen of a monitor 5... ..9B shows an example of the other English-speaking communicator's display screen when the terminal device is in the message exchange mode. Here, "konnichiwa" ("hello" in Japanese) is converted

and... ..no. "2" is transmitted to player 2 and player 3 who are participating in a communication-type game together with player 1.

The terminal device of player 2 refers to the message conversion table shown in Fig. 12, decodes... .."2" to "konnichiwa" ("hello" in Japanese). The message "konnichiwa" is displayed on the screen.

The terminal device of player 3 refers to the message conversion table shown in Fig. 12, decodes... ..In order to send a reply, player 2 designates a message selection mode to the terminal device and displays multiple greeting message cards on the screen. "Konnichiwa" ("hello" in Japanese) is... ..is sent to the server and then transferred to player 1 from the server. The terminal device of player 1 refers to the message conversion table and decodes the received message...in order to send a reply, player 3 designates the message selection mode to the terminal device and displays multiple greeting message cards on the screen. "HELLO" is selected and transmitted... ..is sent to the server and then transferred to player 1 from the server. The terminal device of player 1 refers to the message conversion table and decodes the received message... ..is thus performed between the players.

By referring to the message conversion table, the respective terminal devices can directly convert messages into the receiving party's language and send such messages. For example, when player 1 selects "ohayou" ("good morning" in Japanese), the terminal device may refer to the message conversion table and convert the message into "GOOD MORNING... ..which is represented by a group of character codes.

Furthermore, when messages are exchanged between terminal devices utilizing different languages, the server may assume the role of referring to the message... ..implemented at the respective devices.

The CPU (for example, the main CPU 101) of the terminal device implements these procedures when a card message mode flag is identified during the execution... ..card no. "2" is transferred to player 2 and player 3 from the server. The terminal device of player 2 refers to the message conversion table and converts message card no. "2" into "konnichiwa" ("hello" in Japanese) and displays such message card on the display. The terminal device of player 3 refers to the message conversion table and converts message card no... ..card no. "2", the message is converted into the receiving party's language at the terminal device and the message is transmitted to the receiving party after the language of the... ..also by this method.

Although the embodiments described above suggest performance of online conversation and communication by characters via the server, the present invention is not restricted to these embodiments. The terminal game devices can communicate with each other directly through a network.

Fig. 13 is an explanatory diagram illustrating another background example. This example suggests a character inputting device in a portable communication device or a portable information processing device.

In Fig. 13, the portable communication device 300 is structured roughly by a cover 300a and a main body 300b. The... ..key 322 on the left side for facilitating operation by both hands when the portable communication device is held in either hand.

At the lower verge of the input operating panel... ..uppercase modes.

Fig. 14 is a block diagram schematically illustrating the structure of the portable communication device. In this Figure, any components corresponding to those shown in Fig. 13 are indicated... ..display unit 308 any information written into the video RAM by the CPU 301. A communication interface 306 exchanges data signals between an analog circuit modem 309. Connected to the analog circuit modem 309 is, for example, a public telecommunication line, or a local area network. An external interface 307 intermediates the computer system and an externally connected device (for example, a printer). The external interface 307 includes... ..pointing devices can be used instead.

Industrial Applicability

As explained above, the word-card character communication device according to the present invention requires no keyboard and even those having no knowledge...

Claims:

1. A communication device connected to a network and enabling communication of messages at least by characters, comprising:

a transmitting and receiving means for implementing communication of messages with a communication device of the other party of communication via said network;

a communication content displaying means for displaying in a communication content displaying area of a screen display the content of communication with said communication device of said other party;

a candidate term displaying means for displaying in a candidate... ..displaying area of said screen display a group of candidate terms prepared in advance for communication of said messages;

a term selecting means for outputting a term selected by a transmitter... ..messages and sending the formed message to said transmitting and receiving means.

2. A character communication device according to claim 1, wherein the communication device of said other party is either a host computer executing a program of a communication-type game in accordance with accesses from a plurality of computers having a character communication device, or a communication device operated by participants taking part in said communication-type game.

3. A character communication device according to claim 1 or 2, wherein said candidate term displaying means receives said group of candidate terms from said communication device of said other party.

4. A character communication device according to claim 2, classified at least according to the names of said participants... ..nouns, pronouns, verbs, adjectives, inflections, symbols, or short sentences registered by users.

5. A character communication device according to any one of claims 1 through 4, wherein said group of candidate... ..said plurality of pages is displayed in said candidate term displaying area.

6. A character communication device comprising:

a storing means for storing a message language conversion table including a single... ..converting a selected message to a message in a language of a party with whom communication is held; and

a transmitting means for transmitting the converted message to said communication, counterpart.

7. A character communication device comprising:

a storing means for storing a database including a plurality of messages in... ..and

a transmitting means for transmitting the output message marks to a party with whom communication is held.

8. A character communication device according to claim 6 or 7, wherein said messages are displayed in a form of cards.

9. A game device comprising character communication device according to any one of claims 1 through 8.

10. A game device according... ..a game controller serving as an inputting device of the game device.

11. A character communication system connected to a network and structured to include a plurality of character communication devices capable of performing message communication at least by characters, comprising:

a first character communication device used for communication by a first message group in one language; and

a second character communication device used for communication by a second message group in another language;

wherein communication between said first and second character communication devices are performed using symbols commonly assigned in advance to messages having common meanings, included in each of said first message group and said second message group.

12. A character communication system comprising:

a first character communication device for displaying messages in a first language;

a second character communication device for displaying messages in a second language; and

a network for connecting both communication devices,

wherein said first character communication device comprises:

a storing means for storing a message table including a plurality of messages... ..message table; and

a transmitting means for transmitting the converted message to said second character communication device.

13. A character inputting device for inputting characters expressed by a combination of vowels... ..includes a cross key, a joystick, a pointing device or a trackball.

17. A portable communication device including a character inputting device according to any one of claims 13 through 16.

Claims: ...B1

1. A character communication system connected to a network (203) and structured to include a plurality of character communication devices (1) capable of performing message communication by exchanging and displaying message cards which display messages at least by characters, the system comprising :a first character communication device used for communication by a first group of message cards in one language; and

a second character communication device used for communication by a second group of message cards in another language;

whereby message communication between said first and second character

communication devices is performed using symbols (1, 2, 3... n) commonly assigned in advance to message... ..said second message card group, of which the messages have common meanings.

2. A character communication system according to claim 1, wherein said first character communication device comprises:a storing means for storing a message table (Fig. 12) including a plurality... ..message table; and

a transmitting means for transmitting the converted message to said second character communication device.

Claims: ...B1

1. Systeme de communication de caracteres connecte a un reseau (203) et structure pour comprendre une pluralite de dispositifs de communication de caracteres (1) pouvant executer la communication de messages en echangeant et en affichant des fiches de messages qui affichent des messages au moins au moyen de caracteres, le systeme comprenant : un premier dispositif de communication de caracteres utilise pour la communication par un premier groupe de fiches de messages dans une langue ; et

un second dispositif de communication de caracteres utilise pour la communication par un second groupe de fiches de messages dans une autre langue;

par lequel quoi la communication de messages entre lesdits premier et second dispositifs de communication de caracteres est executee en utilisant des symboles (1, 2, 3...n) affectes communement en... ..groupe de fiches de messages, dont les messages ont des significations communes.

2. Systeme de communication de caracteres selon la revendication 1, dans lequel ledit premier dispositif de communication de caracteres comprend : un moyen de stockage destine pour stocker une table de messages (figure... ..messages ; et

un moyen de transmission pour transmettre le message converti audit second dispositif de communication de caracteres.

7/K/33 (Item 2 from file: 348)

EUROPEAN PATENTS

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Specification: ...virtual spaces, such as a virtual shopping mall and the like, are created with a computer, and data relating to the virtual spaces are transmitted to produce images of the virtual spaces which are displayed on display

devices of client terminals, using computer graphics, data bases, and the like. At present, a virtual space information processor which, in... ..loaded on the memory, then a process corresponding to a request from an individual client terminal is executed each time that a request for data transmission or the like is received from a client terminal. This requires an enormous amount of time for responding to a single request. Thus, a request from a client terminal can not be handled on a real-time basis, which eventually irritates the user operating the client terminal. The problem becomes worse when a plurality of client terminals are connected.

In addition, a... ..loaded on the memory each time that a request is received from an individual client terminal, which means that most of the memory is consumed by modules. Therefore, a very large... ..very long processing time has been required for conventional virtual space information processors because process communication between individual processes on the memory is necessary to transmit to individual client terminals data... ..a memory. Therefore, loading a module each time a process is requested from a client terminal becomes unnecessary with the above-described preferred embodiment, which results in a significantly reduced response... ..information processor.

Fig. 3 is a block diagram illustrating a hardware composition of a client terminal.

Fig. 4 is a schematic diagram illustrating a system composition of a virtual space information... ..status in which a virtual space is displayed on a display unit of a client terminal.

Detailed Description of Preferred Embodiments

The above described and other objects, features and advantages of...information processor 10, to which any number of client terminals 100 are connected via a communication network 50, is constructed so that information with regard to a virtual space constructed in the... ..plurality of users on individual client terminals 100.

Although the Internet is used as the communication network 50 in this preferred embodiment, other types of networking devices, systems and means can be used such as a public switched telephone network, an ISDN network, or a LAN. Likewise, a communication protocol to be used is not limited to TCP/IP (Transmission Control Protocol/Internet Protocol) used in this preferred embodiment but other communication protocols can also be used.

Fig. 2 is a block diagram illustrating a hardware composition... ..a variety of modules, during operation of the virtual space information processor 10.

Moreover, a communication control unit 20, a display function unit 22, and an input function unit 24 are connected to the CPU 12. The communication control unit 20, such as a modem or a terminal adapter, establishes data communication with a plurality of client terminals 100 via the communication network 50 and controls data transmission and reception. The display function unit 22, such as a... ..having a CPU 102, a ROM 104, a storage device 106, a RAM 108, a communication control unit 110, a display function unit 112 and an input function unit 114. The... ..Netscape Navigator, and unlike the case with the virtual space information processor 10, the client terminal 100 is composed so that data written in HTML (Hyper Text Markup Language) format can...the virtual space information processor 10, HTTP (Hyper Text Transfer Protocol) connection between the client terminal is established, programs necessary for displaying the virtual space on the display function unit 112 of the client terminals 100 are transmitted, and data communication is appropriately performed to maintain the connection with the client terminal. The pseudo-user management function unit 36 is a module for performing and controlling pseudo... ..characters assigned to the user in a game using the virtual space are stored.

A communication router 56 is a module which mainly controls data transmission and reception between the client terminals 100. The communication router 56 preferably has a buffer capable of queuing a plurality of requests transmitted by packet communication from the client terminals 100, and a network buffer 58 for fetching the requests from the buffer on a first-in first-out basis. The network buffer 58 also performs a function of transmitting the results of processing requests to individual client terminals 100. The communication router 56 also has a connection interface 60 which determines the contents of a request fetched from the network buffer 58 and passes

the contents of the request to either the HTTP server function unit 34 or the response function unit 42. Here, fetching of a request from the network buffer 58 is controlled so that the following request will not be fetched until all the processing for the current request, having been fetched from the network buffer 58 by modules such as the HTTP server function unit 34 or the response function unit 42, are completed and the results are transmitted from the network buffer 58 to the client terminals 100.

Thus, consistency of data provided from the virtual... ..another request will not occur while one request is being processed.

The procedure of data communication performed between the virtual space information processor 10 and a plurality of client terminals 100... ..client terminals 100 to the virtual space information processor 10. The packet queued in the network buffer 58 is passed to the HTTP server function unit 34, after a corresponding module... ..a user ID and a password is transmitted to the client terminals 100 via the network buffer 58.

The user inputs an appropriate user ID and password into corresponding fields displayed... ..of instructions to the character 200 are displayed on the WWW browser of the client terminal 100 as shown in Fig. 6. Thus, the user can move around or pick up... ..of the virtual space due to individual processings is transmitted not only to the client terminal 100

Claims: ...said memory and adapted to be connected to a plurality of client terminals via a communication network; and

a plurality of modules for processing requests sent from said client terminals relating to...

7/K/34 (Item 3 from file: 348)

EUROPEAN PATENTS

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Inventor:

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Specification: ...a preferred embodiment of the present invention, the center cluster module further comprises a first optical communication unit having a first light receiving and emitting unit for receiving and emitting a light beam, the first optical communication unit being removably attached to the base face; and a second optical communication unit having a second light receiving and emitting unit for optical communication with the first light

receiving and emitting unit, and a battery for use in operating the second light receiving and emitting unit, the second optical communication unit being removably attached to the sub face.

According to the present invention, the light beam from the first light receiving and emitting unit in the first optical communication unit that is removably attached to the base face is received by the second light receiving and emitting unit in the second optical communication unit that is removably attached to the sub face. This establishes communication between the base and sub faces. The second optical communication unit may be attached in the sub face. Under such circumstances, the second light... and emitting a light beam and the sub face is provided with a removable optical communication unit having a second light receiving and emitting unit for communicating with the first light... is allowed to communicate with the second light receiving and emitting unit in the optical communication unit removably attached to the sub face.

The nature, principle and utility of the invention... 17C are diagrams of examples of stand-alone operation in pieces of equipment during a network failure in a center cluster module system;

Fig.18 is a flowchart that explains the... alone operation of a CD player;

Fig.19 is a diagram of an on-board network system mounted in a vehicle;

Fig.20 is a block diagram of equipment connections to... a schematic configuration of the base face and the sub face while they are on communication;

Fig.40 is a structural block diagram of the base face and the sub face during their communication; and

Fig.41 is a diagram illustrating a base face having a light receiving and... and 10, the expansion block 53 comprises such equipment as a controller 55 comprising a communications IC, etc., together with equipment connection slots 57, a CD changer 58, an amplifier (AMP... and 17B are depicted examples of stand-alone operation of equipment when there is a network malfunction in the center cluster module system. Let us assume that, in Fig.5, a... designed so that each piece of equipment can operate in a stand-alone mode during network malfunctions.

Fig.17A diagrams an example in which a CD unit is operating in stand... button 103 for ejecting CDs, a changeover switch 104 for switching between stand-alone and network modes, and a CPU 103a.

Stand-alone operation for a CD player will now be... stand-alone mode is not active, then the CPU 103A determines whether or not the network is functioning normally (step S105). If the network is normal, then the eject signal from the eject button 103 is sent to the... command, and then stops (step S111).

If, on the other hand, in step S105, the network is not functioning normally, processing is terminated. Also, in step S103, if the stand-alone... is ejected by the drive of the motor (step S115).

In this manner, when the network is normal, CD ejection and other operations are performed, but when the network is malfunctioning, at the CD player 101, it is only possible to push the eject... The AC unit 105 comprises a changeover switch 106 for switching between stand-alone and network modes, an A/C switch 107 to turn the AC unit on and off, and a CPU 107a.

The CPU 107a determines whether the network is normal or abnormal. When the network is functioning normally, changing the changeover switch 106 to the network or turning the A/C switch on or off does not result in any associated operation. In other words, when the network is normal, the controller 15 controls the turning of the AC unit 105 on and off.

On the other hand, if the network is not normal, when the changeover switch 106 is changed to the stand-alone mode... mute function on and off, and a CPU 110a.

The CPU 110a determines whether the network is normal or not. When the network is functioning normally, switching the changeover switch 109 to network or operating the mute switch 110 will have no effect on operations. In other words, when the network is normal, the controller 15 controls the turning of the amplifier 108 on and off.

When the network is malfunctioning, on the other hand, if the changeover switch 109 is switched to stand...
...minimum operation, by performing a stand-alone operation.

Next, the equipment expansion connectors in a network system installed in a vehicle will be described. Fig.19 is a diagram of a network system installed in a vehicle. Network system control equipment is installed in the front of a vehicle 131, while vehicle-forward....connector 139 having a bus line capable of connecting different kinds of equipment on the network is installed. This equipment expansion connector 139 is connected to the vehicle-forward-section slots 135 via a high-speed network line 137.

Fig. 20 is a block configurational diagram of equipment connections to the vehicle... expansion connector 141. The add-on expansion connector 141 is used for connecting to the network a number of pieces of equipment 143d through 143f that exceeds the number of equipment.... via an intermediate bus table 157.

When the configuration described above is employed, an information network system is configured by installing equipment in the vehicle forward-section equipment slots 135 and....more efficient and to easily implement equipment expansion. In addition, when conducting various kinds of communications within the network, electromagnetic interference (EMC) is very effectively countered by carrying this information digitally over the high-speed network line.

A housing corresponding to the on-board equipment slots is next explained. An example... The sub face 265 is provided depending on the grade and/or features of a network and includes, for example, those for a lower grade, those for a higher grade, those....sub face 265 is thus illuminated in a dark environment such as during night.

Next, communication between the base face and the sub face is described. Fig.39 shows a schematic configuration of the base face and the sub face during communication with each other. Fig.40 shows a structural block diagram of the base face and the sub face during the communication.

The base face 257 comprises connectors 264, 337, a switch 331 (corresponding to the operating switches 258 through 260), a communication unit 335 connected to the connectors 264 and 337, and a central processing unit (CPU) 333 for controlling the individual parts and components.

An optical communication pack 321 comprises a connector 324 to be connected to the connector 264 of the....may be formed of a light-emitting diode and a light-receiving diode. The optical communication pack 321 is attached onto the base face 257 by means of connecting the connector... light receiving and emitting unit 315 is for receiving an optical signal from the optical communication pack 321 and for transmitting an optical signal to the optical communication pack 321 by the light emission. For example, the light receiving and emitting unit 315...connector 313 to the connector 339.

The sub face 265 comprises the connector 339, a communication unit 341, a display 347, a driver 345 for use in driving the display 347....343 for controlling the individual parts and components.

With the above mentioned configuration, the optical communication pack 321 can be attached onto the base face 257 by means of connecting the...339.

The light beam from the light receiving and emitting unit 325 of the optical communication pack 321 is received by the light receiving and emitting unit 315 of the battery....emitting I/F 311. The signal contained in light beam is then directed to the communication unit 341 of the sub face 265 via the CPU 312 and the connectors 313 and 339.

Therefore, the base face 257 can communicate with the sub face 265. This communication is achieved with a light beam, a remote operation is also available. It is thus possible to establish communication with the portable sub face

265 with the battery-integrated light receiving and emitting unit... 265 is required to be changed in accordance with the type of a vehicle for communication between the base face 257 and the sub face 265. This reduces the costs for... be added to the base face 257a onto which the sub face 265 is attached.

Communication can be established by means of transmitting the light beam from the light receiving and...

Specification: ...dark environment.

In a preferred embodiment, the center cluster module further comprises a first optical communication unit having a first light receiving and emitting unit for receiving and emitting a light beam, the first optical communication unit being removably attached to the base face; and a second optical communication unit having a second light receiving and emitting unit for optical communication with the first light receiving and emitting unit, and a battery for use in operating the second light receiving and emitting unit, the second optical communication unit being removably attached to the sub face.

According to this embodiment, the light beam from the first light receiving and emitting unit in the first optical communication unit that is removably attached to the base face is received by the second light receiving and emitting unit in the second optical communication unit that is removably attached to the sub face. This establishes

communication between the base and sub faces. The second optical

communication unit may be attached in the sub face. Under such circumstances, the second light... and emitting a light beam and the sub face is provided with a removable optical communication unit having a second light receiving and emitting unit for communicating with the first light... is allowed to communicate with the second light receiving and emitting unit in the optical communication unit removably attached to the sub face.

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Next, communication between the base face and the sub face is described. Fig.39 shows a schematic configuration of the base face and the sub face during communication with each other. Fig.40 shows a structural block diagram of the base face and the sub face during the communication.

The base face 257 comprises connectors 264, 337, a switch 331 (corresponding to the operating switches 258 through 260), a communication unit 335 connected to the connectors 264 and 337, and a central processing unit (CPU) 333 for controlling the individual parts and components.

An optical communication pack 321 comprises a connector 324 to be connected to the connector 264 of the... ..may be formed of a light-emitting diode and a light-receiving diode. The optical communication pack 321 is attached onto the base face 257 by means of connecting the connector... ..light receiving and emitting unit 315 is for receiving an optical signal from the optical communication pack 321 and for transmitting an optical signal to the optical communication pack 321 by the light emission. For example, the light receiving and emitting unit 315... ..connector 313 to the connector 339.

The sub face 265 comprises the connector 339, a communication unit 341, a display 347, a driver 345 for use in driving the display 347... 343 for controlling the individual parts and components.

With the above mentioned configuration, the optical communication pack 321 can be attached onto the base face 257 by means of connecting the... 339.

The light beam from the light receiving and emitting unit 325 of the optical communication pack 321 is received by the light receiving and emitting unit 315 of the battery... emitting I/F 311. The signal contained in light beam is then directed to the communication unit 341 of the sub face 265 via the CPU 312 and the connectors 313 and 339.

Therefore, the base face 257 can communicate with the sub face 265. This communication is achieved with a light beam, a remote operation is also available. It is thus possible to establish communication with the portable sub face 265 with the battery-integrated light receiving and emitting I... 265 is required to be changed in accordance with the type of a vehicle for communication between the base face 257 and the sub face 265. This reduces the costs for... be added to the base face 257a onto which the sub face 265 is attached.

Communication can be established by means of transmitting the light beam from the light receiving and...

Claims: ...19. A center cluster module as claimed in Claim 17, further comprising:

a first optical communication unit(321) having a first light receiving and emitting unit(325) for receiving and emitting a light beam, said first optical communication unit(321) being removably attached to said base face(257); and

a second optical communication unit(311) having a second light receiving and emitting unit(315) for optical communication with the first light receiving and emitting unit (325), and a battery(314) for use in operating the second light receiving and emitting unit(315), said second optical communication unit(311) being removably attached to said sub face.

20. A center cluster module as... emitting a light beam and said sub face(265) is provided with a removable optical communication unit(311) having a second light receiving and emitting unit(315) for communicating with the...

7/K/35 (Item 4 from file: 348)

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Available Text		Language		Update	Word Count
Total Word Count (Document A)					

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7/K/36 (Item 5 from file: 348)

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Country	Number	Kind	Date		
Type		Pub. Date		Kind	Text
Available Text		Language		Update	Word Count
Total Word Count (Document A)					
Total Word Count (Document B)					
Total Word Count (All Documents)					

Specification: ...as a printer unit is integrally installed in information processing equipment such as a personal computer or the like so that the whole ...recording head comprising

a cylindrical-shaped member having a liquid path formed therein to make communication with discharging orifices therethrough, the sleeve-shaped member being able to be inserted into the...and the ink tank cartridge can reliably be connected to each other to make sealable communication between both the flow paths with the aid of a simple and inexpensive connecting mechanism...from a housing thereof, the connecting portion having a flow path formed therein to make communication with the ink discharging orifices of the ink jet recording head,

an ink receiving container... head comprising a sleeve-shaped connecting portion having a flow path formed therein to make communication with the ink discharging orifices of the ink jet recording head and an annular elastic...at the time of liquid feeding so as to permit the filter portion to make communication with the outside, and an atmospheric air intake port through which atmospheric air is introduced into the receiving case to make communication with the porous member, wherein when the valve portion is displaced, a space sufficient to...is installed;

Fig. 20 is a block diagram which illustrates the structure of a circuit network for the information processing unit shown in Fig. 19;

Fig. 21 is a flowchart which...325 formed thereon on the confronting side with the filter 308, and a plurality of communication holes 326 are formed through the stopper 324. In addition, to prevent an occurrence of malfunction that the filter 308 is undesirably deformed, causing the communication holes 326 to be closed by the deformed filter 308, a plurality of ribs 327...between the rear surface of the filter 308 and the stopper 324, a plurality of communication holes 326, a plurality of axially extending grooves 328 and a plurality of radially extending...portion (not shown) for feeding ink to the ink jet recording head and an atmosphere communication port (not shown) by way of which the interior of the ink tank cartridge is...addition, a second opening portion 100D is formed

on the main body 100A to make communication with an environmental atmosphere therethrough, and a plug 102 having a T-shaped communication path formed therein is press-fitted into the second opening portion 100D so as to...received in the ink tank cartridge 303. An ink feed port 330 and an atmosphere communication port 340 are formed through the ink tank cartridge 303. A second filter 308 is...jet recording head 301, and air enters the ink tank cartridge 303 through the atmosphere communication port 340. While the ink impregnated in the porous member 310 is continuously fed to...with reference to Fig. 1.

Structure of an information processing unit (e.g. a personal computer) having the ink jet recording apparatus associated with the ink jet recording unit of the...inserted into the printer section IJP or a recording operation is completed to reach the terminal end of the recording medium P.

Additionally, reference numeral 74 designates an external storage unit...or the like, and a reference numeral 75 designates an external interface portion for making communication with another information processing unit or controlling peripheral equipments while making connection directly to buses...response to an instruction transmitted from the outside for starting a recording operation via a communication system, the controller 81 executes the processing so as not to allow a recording operation...the ink tank cartridge 802. In the figure, reference numeral 809 designates an atmospheric air communication port which serves for preventing the interior of the ink tank cartridge 802 from exhibiting...ink tank 820, a negative pressure adjusting valve 826 is disposed in an atmospheric air communication port 809. The negative pressure adjusting valve 826 is composed of a large circular valve...is inserted into the ink tank cartridge, the valve mechanism B is displaced to make communication between the porous member SP with the ink jet recording head via the liquid feed...converting elements, and a ceiling plate having a common ink chamber formed therein to make communication with the ink paths. The foregoing components are arranged one above another to build a...shown) having ink stored therein is received in the ink tank cartridge 201 while making communication with the ink feeding hole 221. The space remaining in the ink tank cartridge 201...valve BB is held in the state as shown in Fig. 65A, it interrupts the communication between the atmosphere and the interior of the liquid filling container. On the contrary, when...held in the state as shown in Fig. 65B, the ball valve BB permits the communication therebetween. The connecting mechanism TF serves to form a space between the valve mechanism 311...recording apparatus of the present invention can be employed not only as an image output terminal of an information processing device such as a computer, but also as an output device of a copying machine including a reader, and as...

Specification: ...as a printer unit is integrally installed in information processing equipment such as a personal computer or the like so that the whole information processing equipment is constructed with smaller dimensions...is installed;

Fig. 20 is a block diagram which illustrates the structure of a circuit network for the information processing unit shown in Fig. 19;

Fig. 21 is a flowchart which...325 formed thereon on the confronting side with the filter 308, and a plurality of communication holes 326 are formed through the stopper 324. In addition, to prevent an occurrence of malfunction that the filter 308 is undesirably deformed, causing the communication holes 326 to be closed by the deformed filter 308, a plurality of ribs 327...between the rear surface of the filter 308 and the stopper 324, a plurality of communication holes 326, a plurality of axially extending grooves 328 and a plurality of radially extending...portion (not shown) for feeding ink to the ink jet recording head and an atmosphere communication port (not shown) by way of which the interior of the...addition, a second opening portion 100D is formed on the main body 100A to make communication with an environmental atmosphere therethrough, and a plug 102 having a T-shaped communication path formed therein is press-fitted into the second opening portion 100D so as to...received in the ink tank cartridge 303. An ink feed port 330 and an atmosphere communication port 340 are formed through the ink tank cartridge 303. A second filter 308 is...jet recording head 301, and air enters the ink tank cartridge 303 through the atmosphere communication port 340. While the ink impregnated in the porous member 310 is continuously fed to...with reference to Fig. 1.

Structure of an information processing unit (e.g. a personal computer) having the ink jet recording apparatus associated with the ink jet recording unit installed therein... ..inserted into the printer section IJP or a recording operation is completed to reach the terminal end of the recording medium P.

Additionally, reference numeral 74 designates an external storage unit... ..or the like, and a reference numeral 75 designates an external interface portion for making communication with another information processing unit or controlling peripheral equipments while making connection directly to buses... ..response to an instruction transmitted from the outside for starting a recording operation via a communication system, the controller 81 executes the processing so as not to allow a recording operation...the ink tank cartridge 802. In the figure, reference numeral 809 designates an atmospheric air communication port which serves for preventing the interior of the ink tank cartridge 802 from exhibiting...ink tank 820, a negative pressure adjusting valve 826 is disposed in an atmospheric air communication port 809. The negative pressure adjusting valve 826 is composed of a large circular valve...is inserted into the ink tank cartridge, the valve mechanism B is displaced to make communication between the porous member SP with the ink jet recording head via the liquid feed...converting elements, and a ceiling plate having a common ink chamber formed therein to make communication with the ink paths. The foregoing components are arranged one above another to build a...valve BB is held in the state as shown in Fig. 65A, it interrupts the communication between the atmosphere and the interior of the liquid filling container. On the contrary, when... ..held in the state as shown in Fig. 65B, the ball valve BB permits the communication therebetween. The connecting mechanism TF serves to form a space between the valve mechanism 311...recording apparatus using the present invention can be employed not only as an image output terminal of an information processing device such as a computer, but also as an output device of a copying machine including a reader, and as...

7/K/37 (Item 6 from file: 348)

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Country	Number	Kind	Date		
Type		Pub. Date		Kind	Text
Available Text		Language		Update	Word Count
Total Word Count (Document A)					
Total Word Count (Document B)					
Total Word Count (All Documents)					

Specification: ...as a printer unit is integrally installed in information processing equipment such as a personal computer or the like so that the whole information processing equipment is constructed with smaller dimensions...is installed;

Fig. 15 is a block diagram which illustrates the structure of a circuit network for the information processing unit shown in Fig. 14;

Fig. 16 is a flowchart which...325 formed thereon on the confronting side with the filter 308, and a plurality of communication holes 326 are formed through the stopper 324. In ...to prevent an occurrence of malfunction that the filter 308 is undesirably deformed, causing the communication holes 326 to be closed by the deformed filter 308, a plurality of ribs 327... ..between the rear surface of the filter 308 and the stopper 324, a plurality of communication holes 326, a plurality of axially extending grooves 328 and a plurality of radially extending... ..portion (not shown) for feeding ink to the ink jet recording head and an atmosphere communication port (not shown) by way of which the interior of the ink tank cartridge is...received in the ink tank cartridge 303. An ink feed port 330 and an atmosphere communication port 340 are formed through the ink tank cartridge 303. A second filter 308 is... ..jet recording head 301, and air enters the ink tank cartridge 303 through the atmosphere communication port 340. While the ink impregnated in the porous member 310 is continuously fed to...with reference to Fig. 1.

Structure of an information processing unit (e.g. a personal computer) having the ink jet recording apparatus associated with the ink jet recording unit installed therein... ..inserted into the printer section I/P or a recording operation is completed to reach the terminal end of the recording medium P.

Additionally, reference numeral 74 designates an external storage unit such... ..or the like, and a reference numeral 75 designates an external interface portion for making communication with another information processing unit or controlling peripheral equipments while making connection directly to buses... ..response to an instruction transmitted from the outside for starting a recording operation via a communication system, the controller 81 executes the processing so as not to allow a recording operation...ink tank 820, a negative pressure adjusting valve 826 is disposed in an atmospheric air communication port 809. The negative pressure adjusting valve 826 is composed of a large circular valve...converting elements, and a ceiling plate having a common ink chamber formed therein to make communication with the ink paths. The foregoing components are arranged one above another to build a...shown) having ink stored therein is received in the ink tank cartridge 201 while making communication with the ink feeding hole 221. The space remaining in the ink tank cartridge 201...ink container of the present invention can be employed not only in an image output terminal of an information processing device such as a computer, but also in an output device of a copying machine including a reader, and in...

Claims: ...atmosphere communicating portion (1206) when said ink absorbing member (1202) is pressed by said atmosphere communication portion (1206).

2. An ink container according to claim 1, wherein said outlet portion (1212)...

Claims: ...être raccorde a ladite tete (1203) a jets d'encre ; et

une partie (1206) de communication avec l'atmosphère qui fait communiquer ladite partie d'emmagasinage (1201) avec l'atmosphère,

caracteriser... ..une partie decoupee (1212 ; 1001) disposee au moins au voisinage de ladite partie (1206) de communication avec l'atmosphère pour s'enclencher avec un element en saillie qui fait saillie d... ..le comprimer afin d'empêcher l'encre de se concentrer sur ladite partie (1206) de communication avec l'atmosphère lorsque ledit element (1202) d'absorption d'encre est presse par ladite partie (1206) de communication avec l'atmosphère.

2. Recipient a encre selon la revendication 1, dans lequel ladite partie... ..fente s'ouvrant vers deux surfaces comprenant une surface sur laquelle ladite partie (1206) de communication avec l'atmosphère est formee et une surface adjacente a ladite surface.

4. Recipient a... ..formee par une ouverture dans trois surfaces comprenant une surface sur laquelle ladite partie de communication avec l'atmosphère est formee et deux surfaces adjacentes a ladite surface.

5. Recipient a... ..formee par une ouverture dans quatre surfaces comprenant une surface sur laquelle ladite partie de communication avec l'atmosphere est formee et trois surfaces adjacentes a ladite surface.
6. Recipient a... ..1001) formees symetriquement par rapport au centre de ladite surface sur laquelle ladite partie de communication est formee.